

Weston Electrical Instrument Co.
Newark, New Jersey
in
Northern Electric Co., Ltd.
General Catalogue No. 7
1945

WESTON TESTING INSTRUMENTS

Model 45 Portable D.C. Instruments



Sturdy, dependable instruments for rugged service. Accurate within $\frac{1}{2}$ of 1 per cent. Shielded from external magnetic fields; permanent magnet moving coil type.

Housed in polished hardwood cases, with hinged covers and carrying handles.

Voltmeters, ammeters and milliammeters are 8 x 8 x $4\frac{3}{4}$ inches; scale length, $5\frac{3}{8}$ inches; approximate weight, 9.9 pounds.

VOLTMETERS

Ranges	Scale Divs.	List Price Each	Ranges	Scale Divs.	List Price Each
*0.2-0-2.8	150	\$96.00	150/3	150	\$104.00
1.5	150	96.00	150/15	150	104.00
3	150	96.00	150/75	150	104.00
5	100	96.00	300/150	150	110.40
15	150	96.00	600/150	150	123.20
150	150	96.00	600/300	150	123.20
300	150	102.40	750/150	150	129.60
600	120	115.20	150/15/3	150	112.00
750	150	121.60	300/150/3	150	118.40
15/3	150	104.00	750/300/150	150	137.60

*Scale adapted for use in connection with cadmium test on storage batteries.

AMMETERS

Range	Scale Div.	List Price Each	Range	Scale Div.	List Price Each	Range	Scale Div.	List Price Each
1.5	150	\$107.20	25	125	\$107.20	300	150	\$109.20
3	150	107.20	50	100	107.20	500	100	114.00
5	100	107.20	75	150	107.20	750	150	118.40
10	100	107.20	100	100	107.20	1000	100	128.00
15	100	107.20	150	150	107.20	1500	150	142.40
			200	100	107.20	.....	.....	.....

MILLIAMMETERS

Range	Scale Divs.	Resis. Ohms	List Price Each	Range	Scale Divs.	Resis. Ohms	List Price Each
1.5	150	360	\$97.60	100	100	0.50	\$ 96.00
3	150	210	97.60	150	150	0.35	96.00
7.5	150	28	96.00	300	150	0.17	96.00
15	150	3.3	96.00	750	150	0.07	100.00
30	150	1.67	96.00	1000	100	0.05	107.20
75	150	0.70	96.00	1500	150	0.03	107.20

VOLT-AMMETERS

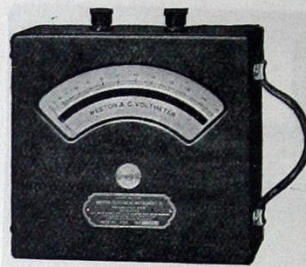
Volts	Ranges Amperes	Scale Divisions	List Price Each
350	350 MA	140	\$128.00
*30/3	30/3/0.3/0.03	150	168.00
†150/30/3	30/3/0.3	150	160.00
150/15/1.5	15/1.5/.15	150	160.00
*150/15/3	15/1.5/.15	150	160.00

*Conforms with A.R.A. specifications.

†Designed especially for railway use. All ranges protected by replaceable fuses.

WESTON TESTING INSTRUMENTS

Model 155 Portable A.C. Instrument



Movable iron type. Length of scale, $5\frac{1}{4}$ in. Black walnut case without cover, leather carrying handle.

Power consumption: Voltmeters at 115 volts, 6.5 watts; at 115 volts, 25 or 60 cycles, 6.5 volt-amperes. Ammeters at 5 amperes, 1.1. watts; at 5 amperes, 25 cycles, 1.1 volt-amperes; at 5 amperes, 60 cycles, 1.4 volt-amperes.

VOLTMETERS

Dimensions: to 300 volts, 7 x $7\frac{1}{8}$ x $3\frac{1}{4}$ inches; above 300 volts, $7\frac{3}{4}$ x $8\frac{3}{4}$ x 4 inches. Weight, to 300 volts, 4 pounds; above 300 volts, 5 pounds.

Voltmeters are self-contained up to and including 750 volts. Higher ranges may be obtained by using Models 311 or 457 portable potential transformers, in conjunction with a 150-volt instrument.

Range	Single Range Res. Ohms	Scale Divisions	List Price Each
30	150	150	\$92.80
50	415	100	92.80
75	625	150	92.80
125	1670	125	92.80
150	2000	150	92.80
250	4150	125	97.60
300	5000	150	99.20
500	8333	100	107.20
600	10000	120	112.00
750	12500	150	118.40

Double Range

Range	Double Range Res. Ohms	Scale Divisions	List Price Each
150/75	1250/625	150	100.80
300/150	5000/2500	150	107.20
600/150	10000/2500	150	120.00
600/300	10000/5000	150	120.00
750/150	12500/2500	150	126.40
750/300	12500/5000	150	126.40

Triple Range

Range	Triple Range Res. Ohms	Scale Divisions	List Price Each
450/300/150	7500/5000/2500	150	123.20
600/300/150	10000/5000/2500	150	128.00
750/300/150	12500/5000/2500	150	134.40

Voltmeters to be used on 500 cycles add \$6.40 to above prices.

AMMETERS

Dimensions: up to 300 amperes 7 x $7\frac{1}{8}$ x $3\frac{1}{4}$ inches; above 300 amperes, $7\frac{3}{4}$ x $8\frac{3}{4}$ x 4 inches.

Range	Approx. Res. Ohms	Single Range Inductance Henries	Scale Div.	List Price Each
1	1.15	0.00244	100	\$89.60
2	0.287	0.00057	100	89.60
3	0.128	0.00027	150	89.60
5	0.0435	0.000091	100	89.60
10	0.0127	0.000023	100	89.60
15	0.0066	0.000011	150	96.00
25	0.0032	0.0000033	125	96.00
50	0.00117	.....	100	99.20
75	0.00085	.....	150	99.20
100	0.00047	.....	100	104.00
150	0.00034	.....	150	108.80
200	0.00034	.....	100	113.60
250	0.000172	.....	125	118.40
300	0.000172	.....	150	123.20
400	0.000054	.....	80	136.00
500	0.000054	.....	100	136.00

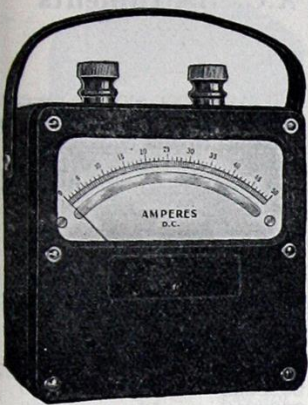
Double Range

Range	Double Range Res. Ohms	Scale Div.	List Price Each
1/.5	1.15/4.6	100	113.60
2/1	0.34/1.36	100	113.60
5/2.5	0.052/0.218	100	113.60
10/5	0.012/0.045	100	113.60

Single and double range model 155 milliammeters are available. Prices on application.

WESTON TESTING INSTRUMENTS

Model 430 Portable D.C. Instruments



Permanent magnet moving coil type. Accurate within three-quarters of one per cent. Unshielded from external magnetic fields.

Voltmeters are available at a standard sensitivity of 1,000 ohms per volt in single and triple ranges.

Ammeters and milli-ammeters are regularly made with single and triple ranges, self-contained up to and including 50 amperes.

Dimensions: $5\frac{1}{16} \times 6\frac{1}{32} \times 3\frac{1}{2}$ inches; scale length, 4 inches. Approximate weight, $3\frac{1}{2}$ pounds.

VOLTMETERS

Range	Scale Divs.	List Price Each	Range	Scale Divs.	List Price Each
3	150	\$68.80	30/7.5/3	150	\$ 84.80
15	150	68.80	75/30/7.5	150	84.80
50	100	68.80	150/15/3	150	84.80
150	150	68.80	300/150/3	150	91.20
300	150	75.20	500/100/10	100	100.80
600	120	88.00	750/300/7.5	150	106.95
750	150	94.40	750/300/150	150	106.95
1000	100	102.40	.....	...	....

Above ranges also available with a sensitivity of 5,000 ohms per volt at an increase in price.

AMMETERS

Range	Scale Divs.	List Price Each	Range	Scale Divs.	List Price Each
1	100	\$68.80	15/3/0.15	150	\$84.80
1.5	150	68.80	15/3/1.5	150	84.80
3	150	68.80	25/2.5/0.5	100	84.80
5	100	68.80	25/5/2.5	100	84.80
7.5	150	68.80	25/10/2.5	100	84.80
15	150	68.80	25/10/5	100	84.80
30	150	68.80	30/3/1.5	150	84.80
50	100	68.80	30/6/3	150	84.80
5/0.5/0.05	100	84.80	30/15/3	150	84.80
5/2.5/0.5	100	84.80	50/5/0.5	100	84.80
10/1/0.1	100	84.80	50/10/2	100	84.80
10/2.5/1	100	84.80	50/20/5	100	84.80
10/5/1	100	84.80	50/25/10	100	84.80

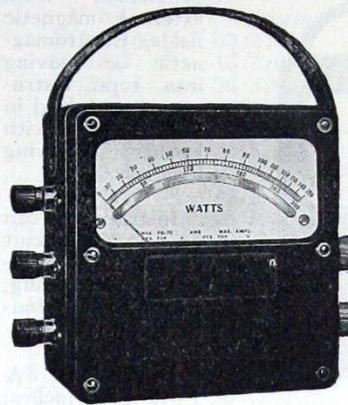
MILLIAMMETERS

Range	Approx. Res. Ohms	Scale Divisions	List Price Each
1	92	100	\$ 70.40
1.5	69	150	70.40
3	12.4	150	70.40
7.5	3.4	150	68.80
15	1.4	150	68.80
30	0.88	150	68.80
75	.....	150	68.80
150	.....	150	68.80
300	.....	150	68.80
750	.....	150	72.80
0.75/0.15/0.03	.....	150	112.00
3/0.3/0.03	.....	150	112.00
15/1.5/0.15	.....	150	104.00
30/7.5/3	.....	150	86.40
150/15/1.5	.....	150	86.40
150/30/7.5	.....	150	84.80
1500/150/15	.....	150	84.80
3000/300/30	.....	150	84.80
3000/750/150	.....	150	84.80

Leather case for single or triple range ammeter, milli-ammeter or microammeter, \$12.00; for single range voltmeter, \$12.00; for triple range voltmeters, \$12.80.

WESTON TESTING INSTRUMENTS

Model 432 Portable D.C. and Single Phase Wattmeters



Electrodynamometer type wattmeter, shielded from external magnetic fields, and accurate within one-half of one per cent. Double voltage and single and double current ranges are self-contained up to 300 volts and 50 amperes. Potential ranges up to 750 volts are available by using external multipliers; higher ranges require the use of potential transformers. Current ranges can be extended

beyond 50 amperes by using a 5-ampere instrument in conjunction with either Model 327, 328 or 461 current transformers.

Potential ranges have maximum voltage capacities as shown in the range listing. The maximum capacity of the current ranges is 50 per cent greater than the normal rated current capacity.

These instruments are accurate on all commercial frequencies up to 133 cycles per second. The phase angle is negligible on such frequencies. They may be used on d.c. and checked in comparison with d.c. standards. Temperature error is less than 1 per cent for 25 degrees C. change in temperature.

As the working error is negligible, they may be left in circuit continuously without appreciable effect on the accuracy.

Power consumption: Potential side, at 115 volts, 1.2 watts; at 115 volts, 25 or 60 cycles, 1.2 volt-amperes. Current side, at 5 amperes, .67 watt; at 5 amperes, 25 cycles, .73 volt-ampere and at 5 amperes, 60 cycles, .98 volt-ampere.

Dimensions: $6\frac{1}{2} \times 5\frac{1}{4} \times 3\frac{1}{2}$ inches; scale length, $3\frac{1}{16}$ inches; weight $3\frac{1}{4}$ pounds.

Volts		Amperes		Watts		Scale Divs.	List Price Each
Normal	Max.	Normal	Max.	Low Range	High Range		
75/150	100/200	1	1.5	75	150	75†	\$112.00
150/300	200/400	1	1.5	150	300	75†	118.40
75/150	100/200	2	3	150	300	75†	112.00
150/300	200/400	2	3	300	600	60†	118.00
75/150	100/200	5	7.5	375	750	75†	112.00
150/300	200/400	5	7.5	0.75 kw	1.5 kw	75†	118.40
75/150	100/200	10	15	0.75 kw	1.5 kw	75†	112.00
150/300	200/400	10	15	1.5 kw	3 kw	75†	118.40
75/150	100/200	20	30	1.5 kw	3 kw	75†	116.80
150/300	200/400	20	30	3 kw	6 kw	60†	123.20
75/150	100/200	50	75	3.75 kw	7.5 kw	75†	121.60
150/300	200/400	50	75	7.5 kw	15 kw	75†	128.00

Approx. Res. Ohms: †Low range, 5500; high range, 11000.

‡Low range, 11000; high range, 22000.

Double current with range changing switch available at an extra charge. Prices upon application.

Leather case for Model 432, \$12.00.

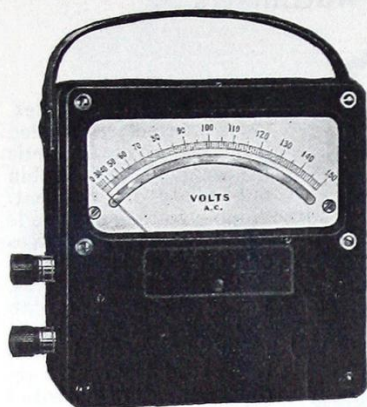
Y-BOXES FOR MODEL 432 WATTMETERS

For use on Balanced 3 Phase, 3 Wire Circuits

Normal Volt. of Instru-	Y-Box Multi-Constant	Normal Line Volt. with Y-Box	Maximum Volt. with Y-Box	Box Type	No.	List Price Each
75	3	150	170	5	1	\$38.40
150	3	300	340	5	2	38.40
150	4	400	450	5	2	38.40
150	5	500	550	5	3	38.40
150	6	600	650	5	3	38.40

WESTON TESTING INSTRUMENTS

Model 433 Portable A.C. Instruments



Shielded from external magnetic fields. Electromagnetic or moving iron type instruments contained in bakelite cases with leather carrying handles.

Instruments can be left in circuit continuously without overheating, therefore no contact key is used.

Dimensions: $5\frac{1}{8}$ x $6\frac{1}{2}$ x $3\frac{1}{2}$ inches;

scale length, $3\frac{1}{8}$ inches. Weight $2\frac{1}{2}$ pounds.

VOLTMETERS

Self-contained for ranges shown. Higher ranges obtained by using multipliers or Model 311 or 457 potential transformer in conjunction with a 150 volt instrument; for use on frequencies up to 133 cycles per second.

Range	Res. Ohms	Scale Div.	List Price Each	Range	Res. Ohms	Scale Div.	List Price Each
10	80	100	\$65.60	10/5	40/20	100	\$73.60
15	168	150	65.60	20/10	160/80	100	73.60
20	224	100	65.60	30/15	336/168	150	73.60
30	425	60	65.60	60/30	850/425	60	73.60
50	1140	100	65.60	150/15	3000/300	150	73.60
60	1370	60	65.60	150/75	5300/2650	150	73.60
75	2660	75	65.60	300/150	22000/11000	150	80.00
100	3500	100	65.60	450/300/150	33000/22000/11000		
125	4400	125	65.60			150	96.00
150	5300	150	65.60	700/300/150	44000/22000/11000		
250	18200	50	70.40			150	100.80
300	22000	60	72.00	750/300/150	55000/22000/11000		
						150	108.80

For Model 433 Voltmeters to be used on 500 cycles, add \$6.40 to prices shown. Leather case for single or double range voltmeters, \$12.00; for triple range, \$12.80.

WESTON TESTING INSTRUMENTS

Model 433 Portable A.C. Instruments

AMMETERS

For use on frequencies up to 500 cycles per second, except triple range ammeters which have self-contained transformers limiting use to a.c. with frequencies up to 133 cycles.

Range	Approx. Res. Ohms	Inductance Henries	Scale Divs.	List Price Each
1	1.13	0.00095	100	\$62.40
1.5	0.476	0.00044	150	62.40
2	0.282	0.00025	100	62.40
3	0.119	0.00011	60	62.40
5	0.053	0.000038	100	62.40
7.5	0.02	0.000017	75	62.40
10	0.014	0.0000084	100	62.40
15	0.007	0.0000036	150	68.80
25	0.003	0.0000013	50	68.80
30	0.002	0.000001	60	68.80
50	0.0005	0.0000003	100	72.00
2/1	0.28/1.13		100	63.20
5/2.5	0.053/0.212		50	63.20
10/5	0.0135/0.054		100	63.20
20/10	0.0033/0.0135		100	89.60
3/1.5/0.75			150	140.80
5/2.5/1			50	140.80
7.5/3/1.5			150	140.80
10/5/1			50	140.80
10/5/2.5			50	140.80
15/7.5/1.5			150	140.80
20/5/2			100	140.80
30/7.5/3			150	140.80
50/20/5			100	140.80
50/20/10			100	140.80

Triple range ammeters operate through self-contained multi-range transformers, therefore they cannot be used on direct current.

Leather case for single, double or triple range ammeters, \$12.00.

MILLIAMMETERS

Range	Res. Ohms	Scale Div.	List Price Each	Range	Res. Ohms	Scale Div.	List Price Each
15	1850	150	\$62.40	250	16.4	50	\$62.40
30	460	60	62.40	300	10.9	60	62.40
75	211	75	62.40	400	6	80	62.40
100	123	100	62.40	500	3.85	100	62.40
150	49	150	62.40	600	2.5	60	62.40
200	29.5	100	62.40	750	2	75	62.40

Milliammeters are available in double range combinations.

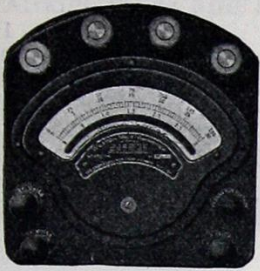
Leather case for milliammeter, \$12.00.

The Buyers in the Canadian market seeking motors, controllers and other power apparatus, will find in the Northern Electric Company one source of supply whatever the requirements may be. Through the Power Apparatus

Specialists, located in the principal cities of Canada, at the command of you and your consulting engineers, for aid in the selection of the proper equipment, the Northern Electric Company stands ready to serve you upon call.

WESTON TESTING INSTRUMENTS

Model 280 Portable D.C. Instruments



Permanent magnet moving coil type. Accurate within 1 per cent. For use where miniature portable precision instruments are required for d.c. testing. Voltmeters and voltmeters have resistances of approximately 100 ohms per volt. Dimensions: $4\frac{1}{4} \times 4\frac{3}{8} \times 1\frac{1}{2}$ inches; scale length, $2\frac{1}{8}$ inches. Weight, 1.1 lbs.

VOLTMETERS

Range	Scale Divs.	List Price Each	Range	Scale Divs.	List Price Each
1.2	60	\$40.00	400/40	40	\$64.00
1.5	75	40.00	350/35	70	64.00
3	60	40.00	25/10/2.5	50	46.40
5	50	40.00	30/3/1.5	60	46.40
7.5	75	40.00	30/15/3	60	46.40
10	50	40.00	50/5/2.5	50	46.40
15	75	40.00	50/25/5	50	46.40
20	40	40.00	100/25/2.5	50	46.40
30	60	40.00	100/50/5	50	46.40
*35	70	68.80	150/15/1.5	75	46.40
50	50	40.00	150/15/3	60	46.40
60	60	40.00	150/30/3	60	46.40
75	75	40.00	150/60/3	60	46.40
100	50	40.00	150/75/3	75	46.40
120	60	40.00	.....	..	...
150	75	40.00	.....	..	...

A special voltmeter with a resistance of 32,000 ohms and provided with a double scale reading volts and ohms.

MILLIVOLTMETERS

Range	Scale Divs.	List Price Each	Range	Scale Divs.	List Price Each
50	50	\$40.00	300	60	\$40.00
75	75	40.00	400	40	40.00
100	50	40.00	500	50	40.00
150	75	40.00	600	60	40.00
200	40	40.00	750	75	40.00
250	50	40.00	...	..	...

AMMETERS

Range	Scale Divs.	List Price Each	Range	Scale Divs.	List Price Each
1	50	\$40.00	5/2.5/0.25	50	\$46.40
1.5	75	40.00	10/1/0.1	50	46.40
2	40	40.00	10/1/0.5	50	46.40
3	60	40.00	10/5/0.5	50	46.40
5	50	40.00	10/2.5/1	50	46.40
7.5	75	40.00	15/3/0.15	60	46.40
10	50	40.00	15/3/1.5	60	46.40
15	75	40.00	25/2.5/0.5	50	46.40
20	40	40.00	25/5/2.5	50	46.40
25	50	40.00	25/10/2.5	50	46.40
30	60	40.00	25/10/5	50	46.40
*50	50	51.20	30/3/1.5	60	46.40
100	50	51.20	30/6/3	60	46.40
150	75	51.20	30/15/3	60	46.40

*Provided with external shunt having a drop of 50 M.V.

MILLIAMMETERS

Range	Approx. Resis.	Scale Divs.	List Price Each	Range	Approx. Resis.	Scale Divs.	List Price Each
1.5	27	75	\$41.60	300	0.33	60	\$40.00
3	18	60	41.60	500	0.2	50	40.00
5	12	50	40.00	750	0.13	75	40.00
10	10	50	40.00	30/15/3	..	60	48.00
20	1.5	40	40.00	50/10/1	..	50	48.00
25	1.2	50	40.00	50/10/5	..	50	46.40
30	1.2	60	40.00	50/25/5	..	50	46.40
50	2.0	50	40.00	125/25/5	..	50	46.40
75	1.33	75	40.00	150/15/1.5	..	75	48.00
100	1.00	50	40.00	150/75/15	..	75	46.40
50	0.66	75	40.00	600/120/30	..	60	46.40
50	0.4	50	40.00	....	..	..	....

WESTON TESTING INSTRUMENTS

Model 280 Portable D.C. Instruments

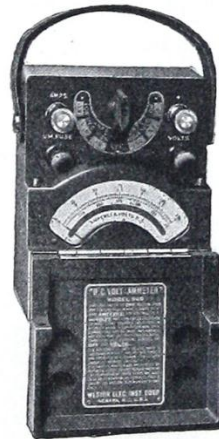
VOLT-AMMETERS

Ranges		Scale Div.	List Price Each
Volts	Amperes		
30/3/1.5	30/3/1.5	60	\$68.80
30/15/3	15/3/0.15	60	68.80
30/3/1.5	30/3/0.3	60	68.80
50/5/2.5	10/1/0.1	50	68.80
50/5/2.5	10/5/0.5	50	68.80
50/25/2.5	25/2.5/0.5	50	68.80
*60/30/6	6/0.6/0.03	60	68.80
150/15/1.5	15/1.5/0.15	75	68.80
150/15/1.5	15/1.5/0.3	60	68.80
150/15/1.5	30/3/1.5	60	68.80
150/15/1.5	30/15/1.5	60	68.80
*150/15/3	15/1.5/0.15	60	68.80
150/15/3	15/3/1.5	60	68.80
150/15/3	30/3/1.5	60	68.80
150/15/3	30/15/3	60	68.80
150/15/3	30/3/0.3	60	68.80
150/15/3	30/15/1.5	60	68.80
150/30/3	30/15/1.5	60	68.80
150/30/3	30/.6/.06	60	68.80
150/60/3	30/.6/.06	60	68.80

*This instrument is particularly adapted for railway signal and automatic train control tests.

Model 280 leather case, price, \$4.80.

Model 540 Portable Fused 6-Range Volt-Ammeter for D.C. Only



Permanent magnet moving coil type. Accurate within 1 per cent. Housed in bakelite case with hinged cover and leather carrying strap.

Voltage ranges protected by single fuses located in a cap. All ranges fused for protection from overloads. Each current range protected by individual fuse mounted in special compartment covered by hinged back. Ranges are brought out through selector switch to 3 binding posts. The instrument can be connected to circuit so that both current and voltage readings can be taken by turning switch without changing connections.

Line is closed at all times when connecting to ammeter binding post. Dimensions: $3\frac{5}{16} \times 4\frac{7}{8} \times 2\frac{1}{2}$ inches; scale length $2\frac{1}{8}$ inches. Weight, 2 pounds.

Ranges		Scale Divisions	List Price Each
Volts	Amperes		
30/3	15/1.5/0.15/0.03	60	\$80.00
30/3/1.5	30/3/0.03	60	80.00
60/30/6	6/0.6/0.03	60	80.00
150/15/1.5	15/1.5/0.15	75	80.00
150/15/3	15/1.5/0.15	60	80.00
150/15/3	15/1.5/0.3	60	80.00
150/15/3	30/3/0.3	60	80.00
150/15/3	30/15/3	60	80.00
150/30/3	30/3/0.3	60	80.00
150/30/3	30/0.6/0.06	60	80.00

When ordering, give range of instrument and quantity of fuses desired for each range.

Weston replacement fuses should be used to give full protection and insure the accuracy of the instrument. All voltage fuses and current fuses up to and including 60 milliamperes may be obtained for \$0.80 each. All current fuses from 100 milliamperes up to and including 30 amperes are \$0.25 each. Minimum charge on any order, \$1.20 net.

WESTON SWITCHBOARD INSTRUMENTS

Models 151, 156, 261 Switchboard A.C. Instruments



Accurate within 1 per cent. Magnetically shielded, movable iron type. Model 261 forms a part of a complete matched line including voltmeters, ammeters, wattmeters, power factor meters, frequency meters and synchroscopes, details of which will be furnished upon request. Prices cover instruments

finished in black. Models 151 and 156 have cast iron cases; Model 261, pressed steel. Regularly supplied in surface type back connected cases. Flush type voltmeters in models 151 and 156, at no extra cost. Flush type ammeters with range of 5 amperes or less supplied without extra charge, but for ranges above 5 amperes an extra charge of \$9.20 each will be made.

Dimensions and Weights:	Models		
	151	156	261
Size at Base, Inches	9 1/16	7 1/4	9 5/8
Projection from Panel, Inches	3 3/32	3 7/32	4
Length of Scale, Inches	6 1/2	5 3/32	6 1/2
Approximate Weight, Pounds	10	8	9

AMMETERS

Amperes	Scale Divisions		Models		
	151-261	156	151	156	261
1	100	50	\$73.60	\$56.00	.....
2	100	40	73.60	56.00	.....
5	50	50	73.60	56.00	\$73.60
10	100	50	73.60	56.00	.....
15	75	75	80.00	62.40	.....
20	100	40	80.00	62.40	.....
25	50	25	80.00	62.40	.....
30	60	30	80.00	62.40	.....
40	40	40	83.20	65.40	.....
50	50	50	83.20	65.40	.....
75	75	75	83.20	65.40	.....
100	100	50	84.80	70.40	.....
150	75	75	92.80	75.20	.....
200	100	40	97.60	80.00	.....
250	50	25	102.40	84.80	.....
300	60	30	107.20	89.60	.....
400	40	40	120.00	102.40	.....
500	50	50	120.00	102.40	.....

Ranges slightly higher or lower than 5 amperes as required when maximum scale value is somewhat larger or smaller than the rated primary capacity of the current transformer, can be supplied at no extra cost.

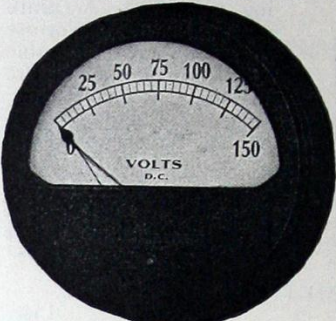
VOLTMETERS

For use on frequencies up to 133 cycles per second. Available for 500 cycle service at an extra cost of \$6.40. With external resistors for ranges above 300 volts.

Volts	Scale Divisions		Models		
	151-261	156	151	156	261
75	75	75	\$76.80	\$59.20	\$76.80
100	100	50	76.80	59.20	76.80
130	65	65	76.80	59.20	76.80
150	75	75	76.80	59.20	76.80
250	50	25	81.60	64.00	81.60
300	60	30	83.20	65.60	83.20
500	50	50	91.20	73.60	91.20
600	60	60	96.00	78.40	96.00
750	75	75	102.40	84.80	102.40

WESTON SWITCHBOARD INSTRUMENTS

Model 252 D.C. Instruments



Accurate within 1 per cent. Permanent magnet moving coil type; magnetically shielded. Harmonizes with Models 260, 343, 355, 356, 368 and 400. Furnished in pressed steel case, dull black finish. Surface type, back connected. Model 252, with suitable exploring coils, can be used as an electric resistance thermometer.

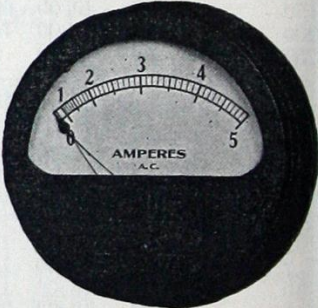
Information on request.

Ammeters provided with external shunts. Voltmeters self-contained up to 300 volts; sensitivity approximately 80 ohms per volt. Voltmeters may be provided with a second but lower range at \$8.80 extra. Diameter at base, 7 3/4 inches; projection from panel, 4 inches; length of scale, 5 3/4 inches. Approximate weight, 9 pounds.

Range	Scale Div.	Am-meters	Volt-meters	Range	Scale Div.	Am-meters	Volt-meters
1	50	\$71.20	...	200	40	\$ 71.20	...
5	50	71.20	...	250	50	71.20	\$68.80
6	30	71.20	\$62.40	300	30	72.40	68.80
10	50	71.20	62.40	400	40	75.20	...
15	30	71.20	62.40	500	50	78.00	...
25	50	71.20	62.40	600	30	80.80	81.60
50	50	71.20	62.40	750	30	84.80	88.00
75	30	71.20	62.40	1000	50	94.40	...
80	40	71.20	...	1200	60	99.20	...
100	50	71.20	...	1500	30	108.80	...
120	60	71.20	62.40	2000	40	115.20	...
130	65	71.20	62.40	2500	50	129.60	...
150	30	71.20	62.40	3000	30	142.40	...

Model 260 A.C. Instruments

Accurate within 1 per cent. Movable iron type; magnetically shielded. Surface type back connected case of pressed steel, dull black finish. This instrument forms a part of a complete matched line including voltmeters, ammeters, wattmeters, power factor meters, frequency meters and synchroscopes. Details furnished on request. Size of base, 7 3/4 inches; projection from panel, 4 1/2 inches; length of scale 5 3/4 inches. Weight, 8 lbs.



AMMETERS

Ammeters are for use on frequencies up to 500 cycles per second. Model 260 ammeter listed in one range only; employed generally with current transformers.

Price, Model 260 Ammeter.....\$56.00

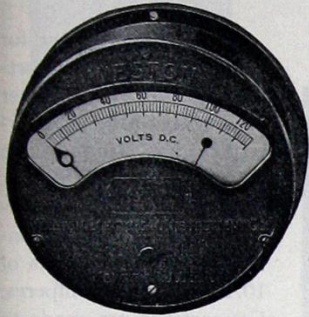
VOLTMETERS

For use on frequencies up to 133 cycles per second. For 500-cycle service, \$6.40 extra. With external resistors for ranges above 300 volts.

Volts	Scale Div.	List Price		Volts	Scale Div.	List Price	
		Each	Each			Each	Each
75	75	\$59.20		300	30	\$65.60	
100	50	59.20		500	50	73.60	
130	65	59.20		600	60	78.40	
150	30	59.20		750	75	84.80	
250	25	64.00		...	..	...	...

WESTON SWITCHBOARD INSTRUMENTS

Model 24, 57 and 251 D.C. Instruments



Permanent magnet moving coil type; magnetically shielded. Accurate within 1 per cent. Model 251 harmonizes with Models 167, 214, 215, 216, 226 and 261 instruments. Prices cover instruments finished in dull black. Models 24 and 57 have cast iron cases; Model 251, pressed steel. Regularly supplied in surface type, back connected

cases. Flush type in Models 24 and 57 can be supplied at no extra cost.

	Models		
Dimensions and Weights:	24	57	251
Size at Base, Inches.....	7¼	9 ⁵ / ₈	9 ⁵ / ₈
Projection from Panel, Inches....	3 ¹ / ₂	4 ¹ / ₂	4
Length of Scale, Inches.....	5 ³ / ₂	6 ¹ / ₂	6 ¹ / ₂
Approximate Weight, Pounds....	9	14	11

AMMETERS

Models 24 and 57 for 75 amperes or less supplied with self-contained shunts. External shunt type may be obtained at no extra cost. All ranges in Model 251 with external shunts.

Models				Models			
Amps.	Div.	24	57-251	Amps.	Div.	24	57-251
1	50	\$71.20	\$80.80	250	50	\$71.20	\$88.80
5	50	71.20	80.80	300	60	72.40	90.00
10	50	71.20	80.80	400	40	75.20	92.80
15	75	71.20	80.80	500	50	78.00	95.60
25	50	71.20	80.80	600	60	80.80	98.40
50	50	71.20	80.80	750	75	84.80	102.40
75	75	71.20	80.80	1000	50	94.40	112.00
80	40	71.20	80.80	1200	60	99.20	116.80
100	50	71.20	80.80	1500	75	108.20	126.40
130	65	71.20	80.80	2000	40	115.20	132.80
150	75	71.20	80.80	2500	50	129.60	147.20
200	40	71.20	80.80	3000	60	142.40	160.00

VOLTMETERS

Have a sensitivity of approximately 80 ohms per volt. Self-contained up to 750 volts. Models 24 and 57 have normal indices operated from outside of case.

Models				Models			
Volts	Div.	24	57-251	Volts	Div.	24	57-251
6	60	\$62.40	\$80.00	130	65	\$62.40	\$80.00
10	50	62.40	80.00	150	75	62.40	80.00
15	75	62.40	80.00	250	50	68.80	86.40
25	50	62.40	62.40	300	60	68.80	86.40
50	50	62.40	80.00	600	60	.....	99.20
75	75	62.40	80.00	750	75	.....	105.60
120	60	62.40	80.00	...	.....	.....	.....

Wattmeters, Power Factor Meters, Frequency Meters and Synchroscopes

These instruments, representing a complete line of conventional switchboards, are available in designs matching the voltmeters and ammeters listed above.

Prices on application.

WESTON SWITCHBOARD INSTRUMENTS

Model 610 Switchboard D.C. Instruments



Permanent magnet moving coil type; magnetically shielded. Accurate within 1 per cent. Harmonizes with all Model 610 instruments. Flush type, back connected. Encased in pressed steel, dull black finish. Model 610 has 2 Mazda 6-volt, No. 40T-3, lamps that provide indirect full scale illumination free from shadows. Lamps are operated from an independent circuit that may be replaced

by removing 4 screws which hold the bakelite front. Size at base, 4 x 4½ inches; projection from panel, ⅞ inch; scale length, 3½ inches. Weight, 2 pounds.

Range	Scale Div.	Am-meters	Volt-meters	Range	Scale Div.	Am-meters	Volt-meters
1	50	\$71.20	...	200	40	\$ 71.20	....
5	50	71.20	...	250	50	71.20	\$68.80
6	30	...	\$62.40	300	30	72.40	68.80
10	50	71.20	62.40	400	40	75.20	....
15	30	71.20	62.40	500	50	78.00	....
25	50	71.20	62.40	600	30	80.80	81.60
50	50	71.20	62.40	750	30	84.80	88.00
75	30	71.20	62.40	1000	50	94.40	....
80	40	71.20	...	1200	60	99.20	....
100	50	71.20	...	1500	30	108.80	....
120	60	...	62.40	2000	40	115.20	....
130	65	71.20	62.40	2500	50	129.60	....
150	30	71.20	62.40	3000	30	142.40	....

Model 610 Switchboard A.C. Instruments

Identical in construction with Model 610 D.C. instruments, described above. Power consumption: Voltmeters on 115 volts, 3 watts; on 25 or 60 cycles, 3 volt-amperes. Ammeters on 5 amperes, 1.1 watts; on 25 cycles, 1.1 volt-amperes; on 60 cycles, 1.4 volt-amperes.

Size at base, 4 x 4½ inches; projection from panel, ⅞ inch; scale length, 3½ inches. Weight 2 pounds.



AMMETERS

For use on frequencies up to 500 cycles per second. Listed in one range only; employed generally with current transformers; price shown covers instruments for currents up to 10 amperes with scales figured to correspond to transformers with which employed.

Price, Model 610 A.C. instruments..... \$56.00

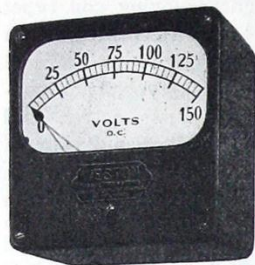
VOLTMETERS

For use on frequencies up to 133 cycles per second. For 500-cycle service, \$6.40 extra. With external resistors for ranges above 300 volts. For ranges between 300 and 750 volts a type 12 No. 1 resistance box mounted on studs at rear of instrument, is provided.

Volts	Scale Div.	List Price Each	Volts	Scale Div.	List Price Each
75	75	\$59.20	300	30	\$65.60
100	50	59.20	500	50	73.60
130	65	59.20	600	60	78.40
150	30	59.20	750	75	84.80
250	25	64.00	...	..	...

WESTON SWITCHBOARD INSTRUMENTS

Model 502 D.C. Instruments



Accurate within 1 per cent. Permanent magnet moving coil type: magnetically shielded. Harmonizes with Models 496, 497, 498, 499, 500 and 501 instruments. With pressed steel case, dull black finish. Surface type, back connected cases. Flush type can be supplied at \$6.40 extra. This instrument, with suitable exploring coils, can be used as an electric resistance thermometer; information on application.

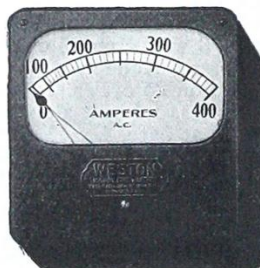
Voltmeters have a sensitivity of approximately 100 ohms per volt and are self-contained up to 750 volts. Voltmeters may be provided with a second but lower range, \$9.20 extra.

Size at base, $5\frac{3}{4}$ x 6 inches; projection from panel, $4\frac{1}{2}$ inches. Weight, 8 pounds.

Range	Scale Div.	Am-meters	Volt-meters	Range	Scale Div.	Am-meters	Volt-meters
1	50	\$71.20	...	200	40	\$ 71.20	...
5	50	71.20	...	250	50	71.20	\$68.80
6	30	...	\$62.40	300	30	72.40	68.80
10	50	71.20	62.40	400	40	75.20	...
15	30	71.20	62.40	500	50	78.00	...
25	50	71.20	62.40	600	30	80.80	81.60
50	50	71.20	62.40	750	30	84.80	88.00
75	30	71.20	62.40	1000	50	94.40	...
80	40	71.20	...	1200	60	99.20	...
100	50	71.20	...	1500	30	108.20	...
120	60	...	62.40	2000	40	115.20	...
130	65	71.20	62.40	2500	50	129.60	...
150	30	71.20	62.40	3000	30	142.40	...

Model 496 Switchboard A.C. Instruments

Accurate within 1 per cent. Movable iron type; magnetically shielded. Surface type back connected case pressed steel, dull black finish. For flush type, add \$6.40. Power consumption: Voltmeters on 115 volts, 6.8 watts; on 25 or 60 cycles, 6.8 volt-amperes. Ammeters on 5 amperes, 1.1 watts; on 25 cycles, 1.1 volt-amperes; on 60 cycles, 1.4 volt-amperes. Size at base, $5\frac{3}{4}$ x 6 inches; length of scale, $5\frac{1}{8}$ inches; weight, 6 pounds.



AMMETERS

For use on frequencies up to 500 cycles per second. Listed in one range only; employed generally with current transformers; price shown covers instrument for currents up to 10 amperes with scales figured to correspond to transformers with which employed.

Price, Model 496 Ammeters.....\$56.00

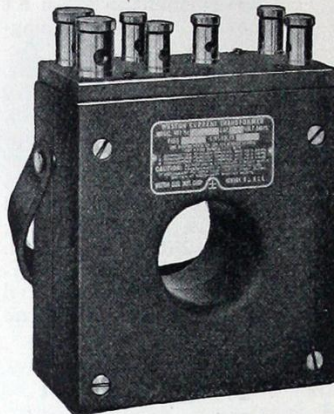
VOLTMETERS

For use on frequencies up to 133 cycles per second. For 500-cycle service, \$6.40 extra. Model 496 requires an external resistor for all ranges.

Range	Scale Div.	List Price Each	Range	Scale Div.	List Price Each
75	75	\$59.20	300	30	\$65.60
100	50	59.20	500	50	73.60
130	65	59.20	600	60	78.40
150	30	59.20	750	75	84.80
250	25	64.00	...	...	...

WESTON CURRENT TRANSFORMERS

Model 461 Portable Multi-Range Current Transformers



Meets the demand for a compact, rugged, portable current transformer embracing primary current ranges from 10 to 800 amperes inclusive. Contained in black bakelite case. Four self-contained primary ranges of 10, 20, 50 and 100 amperes. Connections are made to binding posts and with one turn of the wire through the core opening a range of 800 amperes

results; with 2 turns, 400 amperes; with 4 turns, 200 amperes, etc. The secondary current rating at normal primary current is 5 amperes. Short-circuiting switch is provided for secondary winding to prevent damage if the secondary circuit should be opened while current is on primary. Maximum secondary burden is 5 amperes.

When ordering correction curves state model, type and serial number of instruments to be used.

Dimensions: $6\frac{5}{8}$ x $7\frac{7}{8}$ x $2\frac{3}{4}$ inches. Weight, $7\frac{1}{4}$ pounds.

List Price, Model 461 Transformer.....\$117.60

Leather case for Model 461, add \$14.40.

Model 457 Portable Potential Transformers

A compact, light weight, portable transformer, performing with a high degree of accuracy. Contained in a black walnut case with hinged cover, lock and leather carrying case.



Range-changing switch enables the ratio of primary ranges of 4 to 1 to be easily selected. Designed for maximum secondary burden of 25 volt-amperes at 115 volts and frequencies from 50 to 150 cycles per second. Ratio accuracy is within one half of one per cent from 0 to 25 volt-amperes secondary burden which is sufficient for use with Models 155, 433, 329 or 432 without the use of correction curves. If correction curves are desired, state model and serial number of instruments to be used, and frequency or frequencies at which curves are to be made. If more than one curve is required with different combinations of instruments, list combinations.

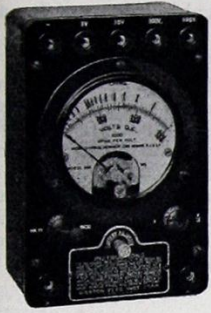
Dimensions: $8\frac{5}{16}$ x $5\frac{3}{4}$ x $5\frac{1}{8}$ inches. Weight, $11\frac{1}{2}$ pounds.

FREQUENCY CYCLES—50 TO 150

Normal Volts	Maximum Volts	List Price Each
2300/575 to 115	{3000/750 to 150 at 60 Cy.}	\$232.00
	{2500/625 to 125 at 50 Cy.}	
3000/750 to 100	3750/937.5 to 125	232.00

WESTON TESTING INSTRUMENTS

Model 564 Volt-Ohmmeters



This instrument consists of a Model 301 with four 1000 ohms per volt voltage ranges of 600/300/30/3 and resistance ranges of either 0-100,000 and 0-1,000 ohms or 0-1,000,000, 0-100,000 and 0-1,000 ohms. A self-contained $4\frac{1}{2}$ -volt C battery is provided for potential. A pair of 50-inch test leads is shipped with each Model 564. Changes in poten-

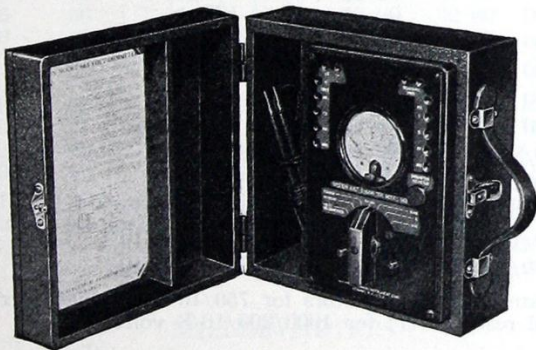
tial of the self-contained battery can be readily compensated for by short circuiting the pin jacks X-X and adjusting the pointer to the zero ohm position by turning the voltage adjuster located at the top of nameplate.

All voltage ranges are brought out to pin jacks. A toggle switch connects the meter in circuit as a voltmeter or ohmmeter. The instrument sensitivity, when used as an ohmmeter, may be changed by a toggle switch from 1 to 100 milliamperes when using the 100,000 or 1,000 ohm scale. When using the 1,000,000-100,000-1,000 ohm instrument, the sensitivity may be changed from .1 or 1 to 100 milliamperes. This simplifies checking up trouble in high or low resistance circuits.

List Price, Model 564, 0-1,000,000 Ohms Ins't. \$56.80

List Price, Model 564, 0-100,000 Ohm Ins't. 48.00

Model 663 Volt-Ohmmeters



This instrument is capable of measuring very high and very low resistances. A super-sensitive instrument requiring only 50 microamperes for full scale deflection makes this ohmmeter possible. This instrument is connected into the circuit network by means of a control switch which selects the desired range of 6 available ohmmeter ranges, or as a milliammeter or voltmeter for d.c. and voltage measurements. Resistance measurements from .1 ohm to 10 megohms; voltage measurements to 1000 volts and current measurements to 100 milliamperes are available.

The scale of the indicating instrument is marked 0-1000 ohms, 0-2.5-5-10 volts and milliamperes. Following ranges are available: 0-5-25-250-2500-25,000-250,000 ohms center scale; 0-200-1,000-10,000-100,000-1,000,000-10,000,000 ohms full scale; 0-2.5-10-100-250-500-1,000 volts full scale, 1000 ohms per volt; 0-1-5-25-100 milliamperes full scale at 500 millivolts.

List Price, Model 663 Less Carrying Case \$96.00

For carrying case, add \$8.00.

WESTON TESTING INSTRUMENTS

Model 330 Portable A.C. Voltmeter



Iron core dynamometer type. Accurate within 1 per cent at 60 cycles, 2 per cent at 25 to 100 cycles. Contained in a mottled red and black bakelite case with hinged cover and leather carrying handle.

Low ranges, combined with an unusually high sensitivity, are possible in this type voltmeter. For use wherever current drain caused by instrument must be limited to a low voltage. Although the high sensitivities of the copper oxide type voltmeter are not possible with this meter, nevertheless its accuracy is

unaffected by wave form and variations in frequencies over relatively wide limits.

Ranges are changed by use of a self-contained range selector switch. To assure accurate readings and eliminate parallax errors, a knife-edge pointer and mirror scale are used.

Dimensions: $3\frac{1}{8} \times 4\frac{7}{8} \times 1\frac{1}{8}$ inches; scale length, $2\frac{1}{8}$ inches. Weight $1\frac{3}{4}$ pounds.

Ranges	Sensitivity Ohms per Volt	Scale Div.	List Price Each
150/15	20	75	\$88.00
10/5/1	20	50	88.00
25/5/1	20	50	88.00
*25/5/2.5	70	50	96.00
**125/25/12.5	20	50	96.00
15/7.5/1.5/.75	12	75	96.00
125/25/5/1	20	50	96.00
150/30/15/1.5	20	75	96.00
150/50/10/1	20	50	96.00

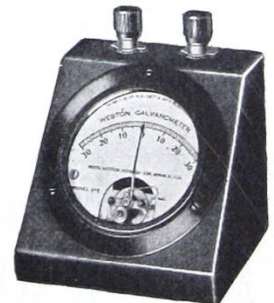
*For measuring voltage drop across operating coil on main relay of network protectors; for 60 cycle service.

**Conforms with A.R.A. specifications.

WESTON STUDENT GALVANOMETERS

Model 375 Student Galvanometers

For student use in school laboratories and wherever a d.c. galvanometer of extreme sensitivity is not essential. Permanent magnet moving coil type. Has a sensitivity of approximately 22 microamperes per division; resistance, about 23 ohms. Scale is zero-center with-in 60 divisions; calibrated 30-0-30 in millimeter divisions. As a galvanometer for portable use instrument is mounted in 45 degree angle base; also without base for mounting in apparatus or on panels.

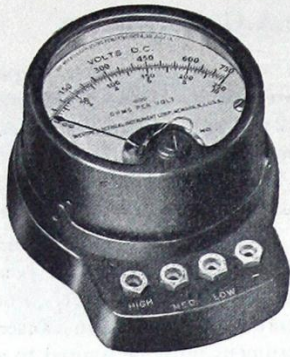


Dimensions: with mounting base, $3\frac{3}{4} \times 3\frac{3}{4} \times 3\frac{1}{2}$ inches; without mounting base—Case, $3\frac{1}{4}$ inches; body, $2\frac{3}{16}$ inches. Scale length, $2\frac{3}{8}$ inches.

List Price, Model 375 With Mounting Base \$20.80

If desired without mounting base, deduct \$4.80 from price shown.

WESTON TESTING INSTRUMENTS

Model 489 D.C.
Portable Instruments

For all-around checking purposes. Models 489 and 528 double range meters and Model 528 single range meter have binding posts. All triple ranges have pin jacks. Accurate within 2 per cent. Model 489 D.C.—Permanent magnet moving coil type; encased in black bakelite; silver etched dial, 2 3/8 in. long, with black markings. Size: 3 3/4 x 3 5/8 x 1 3/8 in. Weight, 11 oz.

VOLTMETERS

Double Range			Triple Range		
125 Ohms Per Volt			1000 Ohms Per Volt		
Ranges	Div.	Scale List Price	Ranges	Div.	Scale List Price
150/7.5	75	\$21.60	750/250/10	75/50	\$37.60
200/8	40	24.40	.....	.....	.....
1000 Ohms Per Volt					
200/8	40	26.00	.....	.....	.....
250/50	50	26.80	.....	.....	.....

AMMETERS

Single Range			Double Range		
Ranges	Div.	Scale List Price	Ranges	Div.	Scale List Price
1	50	\$21.60	10/1	50	\$24.80
10	50	21.60	15/3	75/60	24.80
30	60	21.60	30/3	60	24.80

MILLIAMMETERS—DOUBLE RANGE

Ranges	Approx. Res. Ohms	Scale Divisions	List Price Each
150/15	0.7/4.1	75	\$21.60
150/30	0.7/2.6	60	21.60
VOLT-MILLIAMMETERS			
Ranges	Resistance 2 Ma. Range	Scale Div.	List Price Each
200/8 V., 2 Milliamperes	15 Ohms	40	\$30.00
Leather case for Model 489, \$5.60.			

Model 528 Portable A.C.

Movable iron type; mottled red and black bakelite case. Unshielded from external magnetic fields. Dimensions: 3 3/4 x 3 3/4 x 2 1/8 inches; scale length, 2 3/4 inches.

VOLTMETERS

Ranges	Approx. Res. Ohms	Scale Divisions	List Price Each
150/15	7,350/735	30	\$21.60
300/150	31,600/15,800	30	30.00
600/150	100,000/25,000	30	37.20
600/300	100,000/50,000	30	37.20
150/15/3	8,700/150/30	30/30	26.40
150/8/4	10,000/80/40	30/40	26.40
300/8/4	43,000/80/40	30/40	34.80

AMMETERS

Ranges	Res. Ohms	Scale Div.	List Price Each
1	0.204	50	\$21.60
3	0.0249	30	21.60
5	0.0108	50	21.60
10	0.0067	50	21.60
15	0.003	30	21.60
20	0.0025	40	21.60
30	0.0016	30	24.80
50	0.0014	50	24.80

MILLIAMMETERS

Ranges	Res. Ohms	Scale Div.	List Price Each
15	2000	30	\$21.60
25	690	25	21.60
50	175	50	21.60

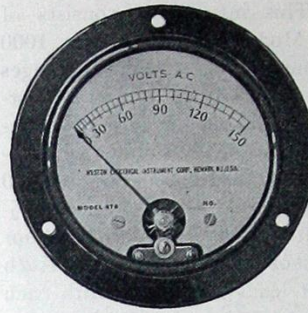
Model 539 Portable Current Transformers

Primary ranges: 2, 5, 10 and 20 amperes, self-contained primary; maximum of 200 amperes inserted primary. For use with Model 528 ammeters.

Price, Model 539, each \$44.80.

WESTON PANEL INSTRUMENTS

Model 476 3 1/4-Inch Panel Instruments



Movable iron type for a.c. only. Accurate within 2 per cent.

Voltmeters indicated thus (*) are supplied with external multiplier box; (†) are self-contained, 4 binding post instruments; (‡) 4 binding post instrument self-contained, for 150/8/4 volts; (§) 3 binding post instrument self-contained for 100/4 volts.

A.C. VOLTMETERS

Volts	Approx. Ohms Per Volt	List Price Each
1.5	3	\$14.40
2	4	14.40
3	6	14.40
5	10	14.40
8	10.5	14.40
10	14	14.40
15	14	14.40
20	26	14.40
25	26	14.40
30	26	14.40
50	52	14.40
100	105	16.00
130	105	16.80
150	105	18.00
250	167	23.20
300	167	26.40
400	167	28.80
500	167	31.20
*600	167	34.40
*750	167	37.60
*1000	167	44.80
†150/8/4	67/10/10	25.60
†150/15/3	67/10/10	25.60
†300/8/4	143/10/10	28.80
‡750/150/16/8/4	67/67/10/10/10	33.00
§1000/200/16/8/4	50/50/10/10/10	40.00

External spool resistors for 750/16 volt ranges; external spool resistors (7) for 1000/200/16/8 volts.

A.C. AMMETERS

Amps.	Approx. Resis.	List Price Each	Amps.	Approx. Resis.	List Price Each
1	.203	\$14.40	10	.0058	\$14.40
1.5	.082	14.40	15	.00219	14.40
2	.05	14.40	20	.00162	14.40
3	.024	14.40	30	.00070	14.40
5	.01	14.40	50	.00057	14.40

A.C. MILLIAMMETERS

Milli-amperes	Approx. Resis.	List Price Each	Milli-amperes	Approx. Resis.	List Price Each
15	2000	\$14.40	100	28	\$14.40
25	690	14.40	250	4.7	14.40
50	175	14.40	500	1.1	14.40

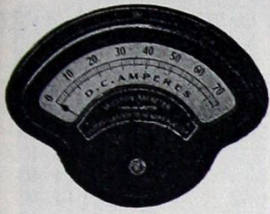
CONDENSER METER

Reads capacity in microfarads. Movable iron type; accurate within 3 per cent when used on voltage for which they are adjusted. Supplied with an external box. 15-1.5 microfarads, 30 divisions.

List Price, Condenser Metereach \$46.40

WESTON SWITCHBOARD INSTRUMENTS

Models 267, 269, 271, 273 D.C. Fan Shaped Instruments



Permanent magnet moving coil type; magnetically shielded. Accurate within 1%. In surface type, pressed steel case with back connections, dull black finish. Model 269, with bakelite case, \$5.60 extra. When a bakelite case is used, instrument is not shielded.

Model No.	Dimensions and Weights			
	267	269	271	273
Width, In.	4 ³ / ₈	5 ⁵ / ₈	7 ⁷ / ₈	9 ⁵ / ₈
Height, In.	3 ³ / ₈	4 ⁷ / ₁₆	6 ¹ / ₄	7 ³ / ₈
Projection, In.	1 ³ / ₈	1 ³ / ₈	1 ³ / ₄	2 ¹ / ₁₆
Scale Length, In.	2 ¹ / ₂	4	6	7 ³ / ₈
Weight, Lbs.	1	1 ¹ / ₂	4	5

AMMETERS

Scale Divs.		Models					
267-269-		271	273	267	269	271	273
Amps.							
1	50	100		\$34.80	\$44.40	\$61.60	\$79.20
1.5	75	75		34.80	44.40	61.60	79.20
2	40	100		34.80	44.40	61.60	79.20
3	60	60		34.80	44.40	61.60	79.20
5	50	50		34.80	44.40	61.60	79.20
10	50	100		34.80	44.40	61.60	79.20
15	75	75		34.80	44.40	61.60	79.20
20	40	100		34.80	44.40	61.60	79.20
25	50	50		34.80	44.40	61.60	79.20
30	60	60		34.80	44.40	61.60	79.20
50	50	50		44.40	44.40	61.60	79.20
75	75	75		44.40	52.00	61.60	79.20
100	50	100		44.40	52.00	61.60	79.20
150	75	75		44.40	52.00	61.60	79.20
200	40	100		44.40	52.00	61.60	79.20
300	60	60		44.80	53.20	62.80	80.40
400	40	40		47.60	56.00	65.60	83.20
500	50	50		50.40	58.80	68.40	86.00
750	75	75		57.20	65.20	75.20	92.80
1000	50	100		66.80	73.20	84.80	102.40
1500	75	75		81.20	87.60	99.20	116.80
2000	40	100		87.60	94.00	105.60	123.20
3000	60	60		113.20	121.20	132.80	150.40

Models 267 and 269 have self-contained shunts up to and including 30 and 50 amperes respectively; above these ranges they are provided with external 100 mv. shunts. Models 271 and 273 are supplied with external 50 mv. shunts. Prices include these shunts.

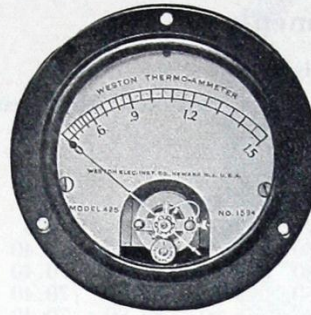
MILLIAMMETERS

Scale Divs.		Models					
267-269-		271	273	267	269	271	273
Milli-							
amps.							
1	50	100		\$36.40	\$46.40	\$54.40	\$72.00
1.5	75	75		36.40	46.40	54.40	72.00
3	60	60		36.40	46.40	54.40	72.00
5	50	50		34.80	44.80	52.80	70.40
10	50	100		34.80	44.80	52.80	70.40
15	75	75		34.80	44.80	52.80	70.40
20	40	100		34.80	44.80	52.80	70.40
25	50	50		34.80	44.80	52.80	70.40
50	50	50		34.80	44.80	52.80	70.40
75	75	75		34.80	44.80	52.80	70.40
100	50	100		34.80	44.80	52.80	70.40
150	75	75		34.80	44.80	52.80	70.40
200	40	100		34.80	44.80	52.80	70.40
250	50	50		34.80	44.80	52.80	70.40
300	60	60		34.80	44.80	52.80	70.40
500	50	50		34.80	44.80	52.80	70.40

Model 267 ranges above 50 milliamperes are shunted and have a drop of approximately 100 millivolts; Model 269 above 25 milliamperes, 100 millivolts; Model 271 above 25 milliamperes, 50 millivolts; and Model 273 above 20 milliamperes, 50 millivolts.

WESTON PANEL INSTRUMENTS

Model 425 3 1/4-Inch Panel Instruments



Thermocouple for a.c. including radio frequencies. Accurate within 2 per cent. Bakelite case should be specified for ammeters and milliammeters when used on circuits above 300 volts when it is not possible to connect instrument in grounded side of line. Bakelite case supplied at no additional cost.

Power consumption thermocouple ammeters, 1 to 4 amperes inclusive, varies from .2 to .4 watt per ampere approximately; 5 amperes and above, .15 watt per ampere.

Ammeters		Milliammeters		
Amperes	List Price Each	Milli-amperes	Resis. Ohms	List Price Each
1	\$25.60			
1.5	25.60			
2	25.60	*10	100	\$80.00
2.5	25.60	*20	26.5	80.00
3	25.60			
4	25.60	*50	5	80.00
5	25.60			
6	25.60	†120	5.2	28.80
8	25.60			
10	25.60	250	1.8	28.80
15	25.60			
20	25.60	500	1.3	28.80

*Vacuum couple type. †For horizontal or not more than 45 degrees mounting; all others for vertical mounting.

GALVANOMETER

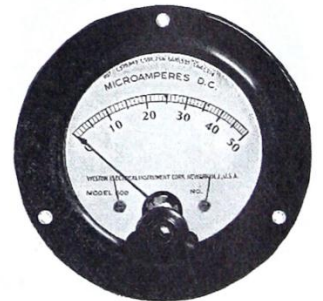
Accurate within 2 scale divisions. For horizontal or 45 degree mounting. 115 milliamperes, 5.2 ohms.

List Price, Model 425 Galvanometer.....each \$28.80

Model 600 Small Panel Microammeters

Permanent magnet moving coil type. Regularly furnished in flush type bakelite case. Also available with flush metal case. Scales are hand calibrated and have a basic accuracy of 2 per cent, except in rectifier type where percentage accuracy is about 5 per cent due to inherent properties of rectifier.

Rectifier instruments can be made with high sensitivity, and for many laboratory and field measurements; voltmeters with a resistance as high as 10,000 ohms per volt can be had. Such instruments can be used for power level measurements across high resistance loads and for any position where extremely small energy drain is required. Similarly, d.c. instruments may be supplied in this model with sensitivities as high as 30,000 ohms per volt.



D.C. MICROAMMETERS

Range		Resis. Ohms	Scale Divs.	List Price Each	Range		Resis. Ohms	Scale Divs.	List Price Each
30	2000	60	\$41.60	200	65	50	\$22.80		
50	2000	50	37.60	300	55	60	22.80		
75	1750	75	37.60	500	30	50	22.80		
100	1300	50	33.60	...	...	...	...	...	...

RECTIFIER TYPE A.C. MICROAMMETERS

*100	3700	50	\$41.60	250	2300	50	\$30.80
200	2500	40	30.80	...	...	...	...

*Despite its low range, this instrument is subject to a temperature error of but 1% per degree centigrade.

WESTON SWITCHBOARD INSTRUMENTS

Models 267, 269, 271, 273 D.C. Fan Shaped Instruments

VOLTMETERS

For description and dimensions of these voltmeters, see preceding column.

Scale Divs.		Models					
267-269-		271	273	267	269	271	273
Volts							
3	60	60	\$34.80	\$44.80	\$52.80	\$70.40	
8	40	80	34.80	44.80	52.80	70.40	
10	50	100	34.80	44.80	52.80	70.40	
15	75	75	34.80	44.80	52.80	70.40	
20	40	100	34.80	44.80	52.80	70.40	
25	50	50	34.80	44.80	52.80	70.40	
30	60	60	34.80	44.80	52.80	70.40	
50	50	50	34.80	44.80	52.80	70.40	
75	75	75	34.80	44.80	52.80	70.40	
100	50	100	34.80	44.80	52.80	70.40	
130	65	65	34.80	44.80	52.80	70.40	
150	75	75	34.80	44.80	52.80	70.40	
200	40	100	36.00	47.60	55.60	73.20	
250	50	50	40.00	50.00	57.60	75.20	
300	60	60	43.20	53.20	59.20	76.80	
600	60	60	*50.40	*60.40	*72.00	89.60	

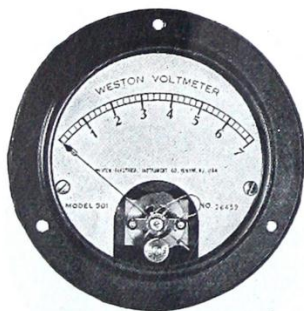
Approximate resistance of voltmeters in ohms per volt: Model 267, 100; Model 269, 100; Model 271, 100; and Model 273, 100.

*Supplied with external resistor.

Millivoltmeters are also available in fan shaped instruments. Prices on application.

WESTON PANEL INSTRUMENTS

Model 301 3 1/4-Inch Panel Instrument



D.C. Model, permanent magnet moving coil type. Accurate within 2 per cent.

A.C. Model, Rectifier type. High sensitivity a.c. instruments obtained by using a full wave copper oxide rectifier with a d.c. movement. Excellent damping even scale characteristics and high overload capacity.

D.C. VOLTMETERS

Approximate resistance in ohms per volt: 3 to 40 volts, 62; 300-500 volts, 666; 600 to 2,000 volts, 62, above 2,000 volts, 100.

Range	Scale Divs.	Price Each	Range	Scale Divs.	Price Each
3	60	\$14.40	150	75	\$18.00
5	50	14.40	200	40	20.80
8	40	14.40	300	60	26.40
10	50	14.40	500	50	31.20
15	75	14.40	1000	50	45.60
20	40	14.40	1500	75	58.40
30	60	14.40	2000	40	72.00
50	50	14.40	3000	60	97.60
100	50	16.00	.....	..	.....

Resistance, 1000 Ohms per Volt.

50	50	19.20	200/8	40	24.00
100	50	20.00	200/50	50	24.00
200	40	22.40	500/100	50	25.20
300	60	24.00	750/250/10	75-50	28.00
500	50	27.60	750/250/100/		
1000	50	33.60	50/10/5	75/50	36.00

WESTON PANEL INSTRUMENTS

Model 301 3 1/4-Inch Panel Instruments

D.C. AMMETERS

Self-contained up to 50 amperes inclusive drop 50 MV±5 per cent.

Range	Scale Div.	List Price Each	Range	Scale Div.	List Price Each
1	50	\$14.40	20	40	\$14.40
1.5	75	14.40	30	60	14.40
2	40	14.40	50	50	14.40
3	60	14.40	2-0-2	40	14.40
5	50	14.40	5-0-5	50	14.40
10	50	14.40	10-0-10	40	14.40
15	75	14.40	20-0-20	40	14.40

D.C. MILLIAMMETERS

Milliammeters above 30 MA are shunted, drop approximately 100 MV.

Range	Scale Div.	List Price Each	Range	Scale Div.	List Price Each
1	50	\$16.00	50	50	\$14.40
1.5	75	16.00	100	50	14.40
2	40	16.00	150	75	14.40
3	60	16.00	200	40	14.40
5	50	14.40	300	60	14.40
10	50	14.40	500	50	14.40
15	75	14.40	150/15\$	75	22.40
20	40	14.40	150/30\$	60	22.40
30	60	14.40	.....	..	.....

D.C. MICROAMMETERS

These instruments are adjusted for use in horizontal or 45 degree position.

Range	Scale Div.	List Price Each	Range	Scale Div.	List Price Each
200	40	\$22.80	500	50	\$22.80

*Supplied with external resistor.

†Self-contained for low voltage, external box for other ranges. ‡Spool resistors supplied for all but low ranges. §Double range milliammeters are 3 binding post type, self-contained.

OHMMETERS

These ohmmeters are independent of battery voltage.

Ohm Scale	Battery Volt.	Rheostat Ohms	List Price Each
0-1000	1.5	100	\$16.80
0-10,000	4.5	250	16.80
0-100,000	4.5	400	21.60
0-500,000	15	400	21.60
0-2,000,000	90	400	24.00

RECTIFIER TYPE VOLTMETERS

Volts	Scale Div.	1000 Ohms Per volt	*2000 Ohms Per Volt
1	50	.....	\$30.80
1.5	75	.....	30.80
3	60	\$27.20	30.80
5	50	27.20	30.80
15	75	27.20	30.80
50	50	27.20	31.60
100	50	27.90	34.40
150	75	30.40	36.80
300	60	32.00	.....

RECTIFIER TYPE MILLIAMMETERS

Milli-amperes	Scale Div.	List Price Each	Milli-amperes	Scale Div.	List Price Each
0.5†	50	\$30.80	2	40	\$24.00
1	50	24.00	5	50	22.40

A.C. MICROAMMETERS

Use in horizontal or 45 degree position.

†500 Microamperes, 50 Scale Division, \$30.80.

Bakelite cases should be specified for ammeters and milliammeters when used on circuits above 300 volts when it is not possible to connect the instrument in grounded side of line. Bakelite case supplied at no additional cost.

WESTON TESTING INSTRUMENTS

Model 614 Foot-Candle Meters



With this meter any user of light can analyze lighting conditions and determine the correct illumination for each particular and individual purpose.

This instrument is calibrated directly in terms of tungsten filament standard lamps. Requires no batteries, voltage or lamps; has indefinite life with permanent calibration.

Operating equipment consists of an indicating instrument, a 3-way toggle switch and a Photronic photo-electric cell all mounted on a bakelite panel. Scale reads directly in foot-candles and has 3 ranges: 0-50, 0-250 and 0-500 which are controlled by the 3-way toggle switch. The Photronic photo-electric cell or light target is hinged so that it can be lifted from the horizontal to the vertical position.

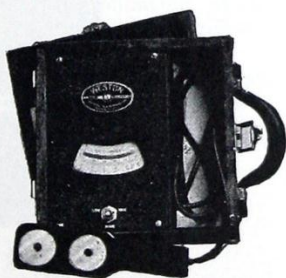
The instrument is always ready for instant use. To measure illumination on a horizontal plane it is only necessary to open cover, hold instrument in horizontal position with the cell or light target lying in its socket and then take the readings. The toggle switch simplifies switching to any of the 3 meter ranges so as to give a good scale deflection for any value of light intensity within maximum range of instrument.

Housed in black bakelite carrying case with a hinged cover and strap handle. Length case, 7 inches; height, $3\frac{1}{2}$ inches; width, $2\frac{1}{4}$ inches. Weight 1.8 pounds.

List Price, Model 614 Complete.....\$64.00

Model 603 Portable Direct Reading Illumination Meters

The Photronic cell in this foot-candle meter is instantaneous in its response to light variations; colour response closely approximates that of the human eye. Calibration of scale is permanent. Size, $8\frac{1}{4}$ x $8\frac{3}{4}$ x $4\frac{1}{2}$ inches; weight, 7 pounds.



3-RANGE TYPE

Consists of an accurate indicating instrument mounted in carrying case and a searching unit or light target with a 6-foot cable permanently attached to instrument. Three ranges, 0-10, 0-50 and 0-250 foot-candles are selected by means of a 3-position switch.

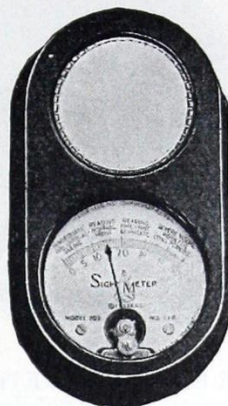
List Price, Model 603 3-Range Type.....\$152.00

6-RANGE TYPE—FOR STREET LIGHTING WORK

Similar to 3-range type. Six ranges: 0-1, 0-2.5, 0-5, 0-25, 0-100 and 0-500 foot candles. Readings as low as .02 foot-candles are possible on the 0-1 foot-candle range. All ranges are selected through a 6-position switch on instrument panel.

List Price, Model 603 6-Range Type.....\$480.00

SIGHT METERS



THE USES OF THE SIGHT METER ARE UNLIMITED

It should take its place with the thermometer in the home, office, store, factory and school.

It is indispensable for checking intensities of artificial light on dull days when natural light fails.

It is invaluable in checking the usefulness of present artificial lighting installations.

Sight Meter will check the maintenance of fixtures. It may indirectly prescribe a thorough washing of shades, etc.

It will act as the keenest judge in giving a decision on the practicability of the foreign vs. the Mazda lamp.

It may be that the condition of walls and ceilings is retarding proper reflection of light—Sight Meter can tell you about this.

Unconsciously, you may be paying for light without getting full value from it due to worn out bulbs. Sight Meter tells when lamps should be replaced.

It checks and recommends proper standards of lighting for practically every type of factory work whereby increased production is realized. Costs are lowered and errors and spoilage decreased.

In the office it will help materially in the locating of desks and files so as to most effectively utilize available light.

And with the Sight Meter the merchant may easily and quickly determine the attention-compelling light intensities on his merchandise displays.

The Sight Meter renders a lifetime of useful and beneficial service. It effects considerable savings and is so moderate in cost that no one should allow seeing to be compromised. Its educational value is tremendous. A demonstration proves its desirability.

Each Sight Meter consists of a Photronic photo-electric cell activating a jewelled microammeter enclosed in a dust-tight black bakelite moulded case. No batteries or outside current supply are needed. With suitable care, the life of the instrument is indefinite. It is corrected to the visible eye curve, constant for temperatures from 0° F. to 95° F. Accurate within close tolerances and dependable in service. Adjustment of pointer to 0 reading is provided by turning a screw on face of meter.

Complete instrument weighs 8 oz. Is $4\frac{5}{8}$ " long; $2\frac{5}{8}$ " wide; $1\frac{5}{8}$ " high. Packed one to a cardboard box; five to a carton; one hundred to a wooden case.

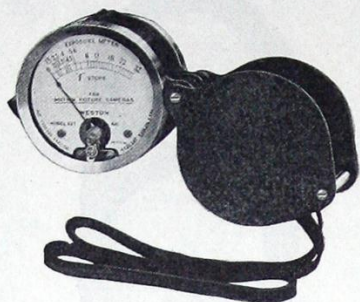
Shipping weights: box 24 oz.; carton 4 lb.; case 70 lb.

Type 1 Sight Meter, 50 f.c. scale.

Type 2 Sight Meter, 100 f.c. scale.

Prices on application.

WESTON EXPOSURE METERS



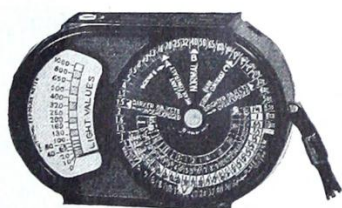
CINE EXPOSURE METER
MODEL 627

Model 627 is very small and compact—but it gives the correct cine exposure, instantly and correctly.

No motion camera enthusiast should be without this dependable little guide to sharper and clearer pictures. It assures uniformly good results for those prized pictures where the opportunity for a retake is gone forever.

Its hinged cover affords complete protection—when swung back it becomes a convenient handle. Sight through the notch on top of the case and read the f stop number to be used, right on the scale. Then set your camera to this f stop, that's all there is to it.

Price on application.



UNIVERSAL EXPOSURE METER
MODEL 617 TYPE 2

For novice or expert this meter operates perfectly for any kind of film, any lens or aperture, under artificial or daylight, for action or still pictures.

Simply sight the meter at the scene, note its brightness reading, then by a turn of the exposure dial you have the proper f stop and shutter settings for your camera. It makes good photographers, as far as exposure is concerned, out of everyone because all guess-work is banished and the photographer's mind is left free to produce artistic effects.

Furthermore, it provides a simple, direct means for pre-determining the density of the finished negative.

It has no battery, is always ready for instant service, and long exposure to direct sunlight does it no harm.

Outfit includes carrying case and shoulder strap.

Price on application.

WESTON EXPOSURE METERS



STUDIO EXPOSURE METER
MODEL 628

This meter is for professional and commercial photographers for taking pictures in studios, homes, churches, industrial plants, etc. It provides a ready means of determining exposures ranging from 1/800 of a second to eight minutes based upon brightness values ranging from 1/10 of a candle per square foot to 1000.

Two Photronic Cells and appropriate exposure dials are connected to the indicator by a flexible cable which permits measurements at points otherwise inaccessible.

It is enclosed in an oak carrying case—weighs 7.2 lbs. and measures $7\frac{3}{4}'' \times 9\frac{3}{4}'' \times 4\frac{3}{4}''$.

Price on application.

WESTON SMOKE ALARM



MODEL 708 SMOKE ALARM

The Model 708 Smoke Alarm is a simplified indicating device for signalling boiler firemen when smoke conditions become excessive. It is entirely self-operating and is easy to install. A beam of light is focused through the smoke stack to a Photronic Cell. This cell generates current in proportion to the amount of light which reaches it. When smoke above a predetermined density level passes up the stack it dims the light beam and the corresponding reduction in cell current generated permits a relay to operate an alarm or signal light. The complete Smoke Alarm consists of a Photronic Cell, a Light Source and a Relay Panel. The Light Source and Cell are mounted opposite each other on the stack and the Relay Panel is located in the boiler room. When excessive smoke dims the light beam the alarm signals for about 30 seconds and continues to signal at 30 second intervals until conditions are corrected. Any electric alarm system, either visual, audible, or both may be used with the Model 708.

Price on application.

WESTON RELAYS

MODEL 634

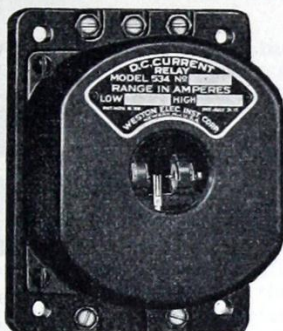
Model 634 is a small relay of fair sensitivity for use on circuits where close selectivity is not required. It has a single set of silver contacts capable of handling 30 milliamperes at 4.5 volts direct current. This relay is surface mounting with three rear terminals, the movable contact and the positive side of the operating coil being connected to a common terminal. The current value at which it operates may be adjusted within a range of about 10% of the operating value.

Price on application.

Sensitive Relays



Model 30



Model 534

MODEL 30

The Model 30 Relay has been made for a great number of laboratory and industrial applications during its thirty years of existence. It is a precision type of permanent magnet, movable coil relay with platinum-iridium contacts which do not oxidize or tarnish in ordinary atmosphere. The magnetic system is so designed as to insure positive and reliable contact pressure. It controls non-inductive circuits up to 200 milliamperes at 6 volts, direct current. It is front connected with five binding posts—two for the coil circuit, one for the movable contact and one for each of the two stationary contacts.

Although it is designed for switchboard mounting, Model 30 may be used as a portable instrument. It is not shielded. Where shielding is required, Model 546 is recommended.

Model 30 is regularly made as voltage and current relays, adjusted to operate in the horizontal position unless otherwise ordered. Special relays can be made, such as the differential type for maintaining the current or voltage balance between two circuits.

Price on application.

MODEL 534

Weston Model 534 Relays are suitable for many commercial uses where a smaller and lower priced device than Model 30 is required. Because of the small size they cannot be made self-contained except for somewhat restricted high range values. They have a lower torque and their accuracy is limited to about one-half that of Model 30. Model 534 is made as non-indicating relays in both flush and surface types—the flush type can also be made with an indicating scale. The surface type has a Bakelite case, is unshielded and is adapted for either switchboard or portable use. The flush type is enclosed in a cast-iron case which shields it from the influence of external magnetic fields and is intended for switchboard use.

These relays are of the permanent magnet, movable coil type with platinum-iridium contacts which do not oxidize in ordinary atmosphere. They control non-inductive circuits up to 200 milliamperes at 6 volts, direct current. Surface type Model 534 relays are adjusted in the horizontal position unless otherwise specified.

Price on application.

WESTON RELAYS

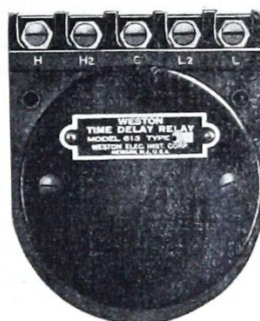


MODEL 630

POWER RELAY

In many industrial processes a relay circuit delivering minute power is used to control a secondary circuit of large power. This is accomplished by means of a sensitive relay which, upon its operation, actuates a power relay. Best operation is assured if these two devices, whose functions are closely inter-related, are considered as a unit. The model 630 Power Relay is designed especially for use with Weston Sensitive Relays, thus realizing the capabilities of both to the fullest extent. These power relays will handle as many as four circuits of one kilowatt each and may be used for the direct control of industrial processes or for operating large contactors transmitting power for heavy machinery.

Prices on application.



Model 613

MODEL 613 TIME DELAY RELAYS

In industrial control problems it is often necessary to have a reasonable time lag between the action of the relay that initiates the operation and the final power relay that actually causes the operation to take place. The Model 613 Time Delay Relay was designed to provide this delay in a simple, reliable manner.

The relay is a compensated thermal type in which the stationary contact is mounted on bi-metallic material the same as the movable contact. This compensates for changes in ambient temperature since both strips will deflect the same amount at the same temperature conditions. The contacts are platinum iridium and are capable of handling 25 watts at 110 volts or under.

The operating coil is wound for 6 volt operation either a.c. or d.c. and is designed to function properly when used with Weston Sensitive Relays.

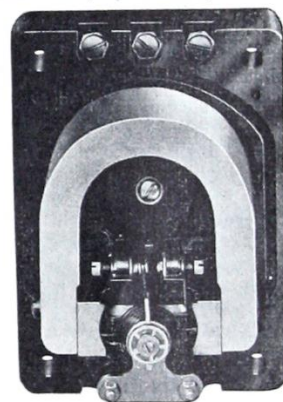
Price on application.

TOGGLE RELAY—MODEL 704

In a great many relay applications for process control and other purposes, the energy drain of a power relay on the control circuit is objectionable. The Model 704 Toggle Relay has been especially designed to take care of such problems.

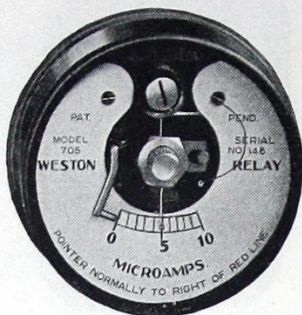
When the Model 704 operates it throws a toggle which makes contact and closes the main control circuit and at the same time disconnects the Model 704 relay coil entirely from the control circuit. At the same time it transfers the circuit from one contact of the operating relay to the other so that when contact is made in the other direction the Toggle Relay may close the other side and open the first.

Ranges and prices upon application.



Model 704

WESTON RELAYS



MODEL 705

Weston Sensitrol relays satisfy the long-felt need for reliable and inexpensive contact making indicators to operate alarm devices in electrical circuits.

These permanent magnet movable coil type relays function directly from the low energy produced by photo cells, thermocouples, resistance thermometers and similar generators of minute power. Values as low as 1 millivolt and $2\frac{1}{2}$ microamperes will effect their operation and their contacts will handle 50 milliamperes at voltages up to 110 a.c. or d.c.

Sensitrol relays are made with three different types of contacts as follows:

1. Single Fixed Contact Type—In this type the stationary contact has a fixed position. These relays may be adjusted to make contact on increasing or decreasing values.
2. Single Adjustable Contact Type—In this type the stationary contact may be adjusted to any desired operating value over either the lower or upper half of the scale. The magnetic contact and an index are fastened to a common arm which may be moved to the desired operating point by means of a knob on the front of the case.
3. Double Adjustable Contact Type—This type has two adjustable stationary contacts—one for high and one for low values. Each has the same arrangement of contact and index assembly as described above for the Single Adjustable Contact Type.

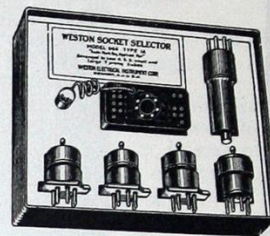
Price on application.

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WESTON RADIO INSTRUMENTS

WESTON RADIO TEST EQUIPMENT

The perfection of standard test equipment, designed to anticipate and compensate for the rapidly changing demands of the industry, relieves the serviceman of a costly replacement burden. The Weston Selective Set Analyzer, employing the new Weston method of Selective Analysis, has practically banished analyzer obsolescence. Inexpensive Socket Selectors provide a practical means of modernizing equipment and in effect, insure the serviceman's investment in modern analyzers and set-servicers. Several of the most widely used radio instruments are described within these pages. Others, including specialized laboratory equipment, are more fully described in a special radio bulletin, available upon request.

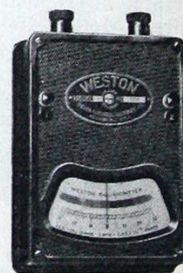
Model 666
Type IA

MODEL 666 SOCKET SELECTORS

The separation of the tube socket, cord and tester plug from the analyzer proper, as embodied in the Selective Analyzers described above permits an excellent method of testing and practically eliminates obsolescence of the test equipment. Analyzers no longer must be replaced because of tube changes. A low cost adapter or socket selector is all that is required.

Model 666 Socket Selectors also provide a most practical and inexpensive means for modernizing any analyzers not equipped to handle 6 and 7 prong tubes without affecting the original operation of the analyzer.

Price on application.

MODEL 440 GALVANOMETER AND
MICROAMMETER

The Model 440 Galvanometer is a supersensitive, double pivoted movable coil type instrument having such characteristics that it may be used to considerable advantage in place of the suspended coil, reflecting type galvanometer in many kinds of service such as for Wheatstone Bridge work, low resistance potentiometers, insulation or high resistance testing and thermocouple work.

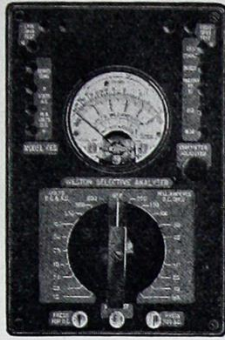
It is made in two case types—one for use as a portable instrument (surface type) and the other (flush type) for inserting into sets such as potentiometers, bridges, etc. Both types have aluminum cases finished in dull black.

Price on application.

WESTON RADIO INSTRUMENTS

MODEL 665 SELECTIVE ANALYZERS

Types 1 and 2

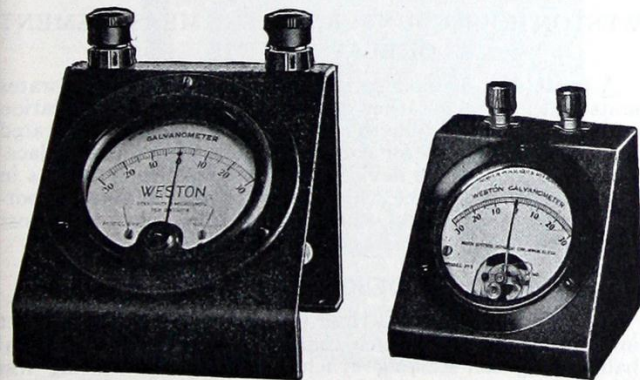


The Model 665 is available in two types. Type 1, the "Rotary Switch Model," is illustrated. The Rotary Switch is incorporated in Type 1 for a more rapid selection of ranges. The Model 666 Type 1-A Socket Selector, which serves to bring the tube socket connections to the analyzer circuit, or the Model 666 Type 2 Capacity Unit, may be mounted on either analyzer in precisely the same manner.

Both Model 665 Analyzers have the following broad list of a-c and d-c voltage ranges: 1,000-500-250-100-50-25-10-5-2.5-1, all with a sensitivity of 1000 ohms per volt. The current ranges of the Type 1 Analyzer are 500-250-100-50-25-10-5-2.5-1 milliamperes, d-c only. The current ranges of the Type 2 Analyzer are the same except that measurements may be taken up to 1000 milliamperes, d-c only. Resistance readings may be made from 1 ohm to 1 megohm. The customary analyzer grid test, including both high and low grid tubes, can be made. The a-c ranges, for ordinary a-c measurements as well as for output readings, are obtained through the use of a copper oxide full wave bridge type rectifier.

The indicating instrument, a Model 301 type, is mounted in a Standardized Service Unit bakelite panel. The assembly is supplied in a sturdy pressed steel case attractively finished in black. A leatherette carrying case can be provided to accommodate the Model 665 Analyzer, (Type 1 or Type 2), and a Model 666 1-A Socket Selector.

WESTON RADIO INSTRUMENTS



Model 699

Model 375

MODEL 699 GALVANOMETER

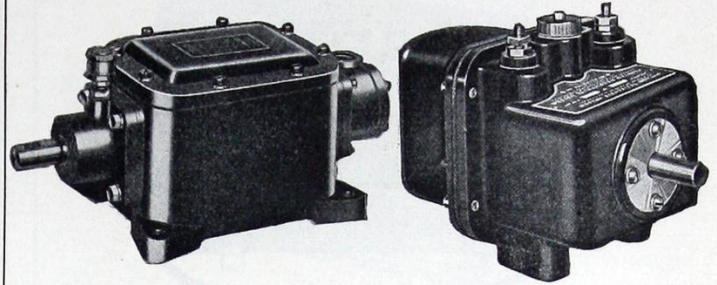
The Model 699 is the latest addition to the group of Weston double pivoted movable coil type galvanometers. It has a sensitivity midway between the Model 375 Student Galvanometer and the Model 440 High Sensitivity Galvanometer, making it most suitable for many laboratory applications where medium sensitivity is required.

MODEL 375 STUDENT GALVANOMETER

The Model 375 Galvanometer is suited for general use wherever a direct current Galvanometer of high sensitivity is not essential but where extreme durability and moderate cost are factors.

It is regularly supplied in the 45° mounting base, as illustrated, but is also available without the base for mounting in special apparatus.

WESTON ELECTRIC SPEED INDICATORS



Type C

Type A

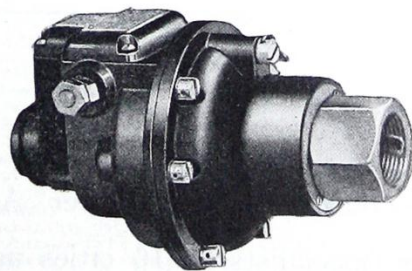
Practically all branches of industry, including the fields of land, marine and aerial transportation, have found innumerable uses for Weston tachometers. Their applications are particularly adaptable to those industries in which time is an important element in the manufacturing process. Whether the problem be one of elapsed time in the development of motion picture film, or the measurement of the rotational speed of centrifugal machines, Weston Speed Indicators may be relied upon to give dependable service combined with a high degree of accuracy.

Weston Speed Indicators consist of a magneto or generator which is connected directly to an indicating instrument calibrated in revolutions per minute, miles per hour, or any unit desired. The magneto, which is mounted at or near the rotating shaft or outlet, generates a voltage directly proportional to its driven speed. One or more indicating instruments may be located at any point remote from the generator.

This electric tachometer has no complicated moving parts and may be easily adapted to machines and devices where the installation of more bulky and complicated apparatus would be impossible. It follows variations in speed smoothly and instantly without jumping. When properly installed and adjusted, the life of the Weston Tachometer is exceptionally long and very little lubrication or attention of any kind is required.

Price on application.

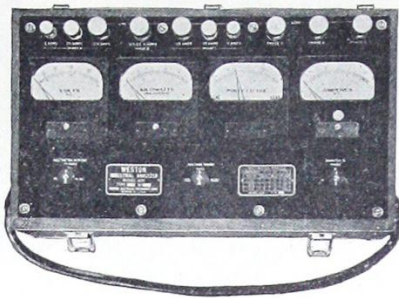
WESTON AVIATION INSTRUMENTS



MODEL 544 MAGNETO-GENERATOR

Although the electric tachometer, or speed indicator, was primarily designed for the measurement of rotational speeds in more basic industries, its applications in the field of aeronautics best exemplify its utility. The Model 544 Magneto-Generator, attached directly to a tachometer outlet on airplane motors, generates a voltage directly proportional to the speed of the motor. This motor speed, expressed in revolutions per minute, can be read on an indicating instrument located in the cockpit panel. Model 544 is necessarily small, compact and light in weight. Various other applications of the electric tachometer have proved their worth in the marine, transportation and industrial fields.

WESTON INDUSTRIAL ANALYZER



MODEL 639, TYPE 1, INDUSTRIAL ANALYZER

The Model 639 Industrial Analyzer is the ideal test equipment for public utility field servicemen, plant maintenance and efficiency men, electrical contractors and particularly those doing alternating current testing, checking or installation work. It is a self-contained unit, designed to analyze industrial loads by measuring current, voltage and power in single and polyphase circuits as well as power factor in 3-phase circuits. A thorough analysis of plant load conditions with the Model 639 quickly detects overloaded or underloaded motors, indicating that relocating transformers or interchanging motors will effect considerable savings. It combines in its strong oak carrying case for Weston Model 610 instruments: a Voltmeter, Wattmeter, Power Factor Meter and Ammeter.

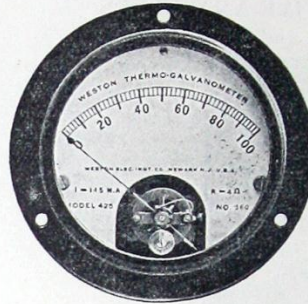
Only a few simple connections are necessary to place the Model 639 in circuit and the maze of interconnecting wires necessary when individual meters are used, is eliminated. The ammeter is equipped with an adjustable pointer stop which allows the maximum value of starting currents to be quickly determined. The stop enables the operator to set the pointer at the anticipated value of the starting current. The proper setting is that point at which the pointer makes only a perceptible movement as the transient current passes. Ordinary portable ammeters, without the pointer stop feature, do not permit the accurate measurement of these starting currents.



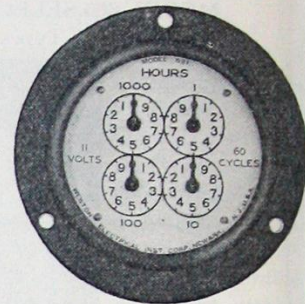
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WESTON INSTRUMENTS



Power Level Indicator.



Hour Counter

POWER LEVEL INDICATORS DB METERS

Instruments for indicating the power level in a line carrying voice or audio frequency current have been used in several applications for many years. Today such indicators are found on nearly every power level panel, where they are used for the control of power levels and the efficient monitoring of circuits. Maximum efficiency of a circuit can only be had when the level is kept as high as is consistent with the overload and other limiting characteristics of the system as a whole. The instrument used for this purpose is known as a Power Level Indicator and is usually supplied with a scale reading in decibels. For this reason it is often called a DB (decibel) Meter.

DATA REQUIRED FOR ORDER OR FURTHER INFORMATION

To insure obtaining the proper instrument, as much information as possible should be given when placing an order. A typical example follows:

Model No.,	Line Impedance,
Case Style,	Internal Resistance,
Case Finish,	Adjustment Level at "O" on scale,
Scale,	Pointer action.
Power Level,	

Prices and ranges on application.

WESTON HOUR COUNTER FOR THE MEASUREMENT OF ELAPSED TIME

A great deal of modern electrical equipment incorporates units which have a rather definite life in hours of operation and which it is desirable to replace at the end of the indicated life rather than wait for complete failure to require replacement. Running such devices to failure frequently results in interruptions to service which might assume serious proportions in certain types of equipment at times when it is most inconvenient and embarrassing.

DESCRIPTION

The Weston Model 691 Hour Counter is offered as a compact integrating device for such control. It consists of a special ball-bearing self-starting synchronous motor, drawing less than 2 watts, connected through high grade cut gears to an indicating train on the face of the instrument. The dial type indicating train runs to 9,999 hours and repeats.

APPLICATIONS

One of the most important applications is in conjunction with devices using vacuum tubes. On medium and high powered radio transmitters one Hour Counter is used to each transmitter unit, and a log is kept of the elapsed time. Records are made when each tube is placed in service and the tubes replaced after some predetermined period of use.

This counter is also applicable to any equipment whatever, where a contact may be made on a circuit closed for the period during which elapsed time is to be totaled. The Model 691 may well be used for the integration of running time on any electrically operated machine, or by subtraction, the idle time for the machine.

Price on application.